Proposition 1B: Goods Movement Emissions Reduction Program

Local Agency Project Application

Application #2 for the Los Angeles / Inland Empire Trade Corridor Source Category: Locomotives

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Submitted by:

(Existing Local Agency)
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Submitted to:
Goods Movement Emission Reduction Program
Stationary Source Division
California Air Resources Board

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1.	General Information	1
2.	Project Proposal	2
3.	Provisions to Customize Proposal	6
4.	Funding Demonstration Elements	8
5.	Air Quality Benefits	10
6.	Staff Resources	. 11
7.	Project Schedule	. 12
8.	Certification to Comply with Program Requirements	. 13
9.	Resolution of the SCAQMD Governing Board	18
10.	Copy of SCAQMD's Letter of Intent	. 18

1. General Information

The South Coast Air Quality Management District (SCAQMD) has been a world leader in administering and implementing incentive programs to reduce mobile source air pollution, across a wide array of vehicle and equipment types that include heavy-duty trucks, marine vessels (including ships at berth), locomotives, construction equipment, forklifts, transit buses, and school buses. Since 2008, SCAQMD has been implementing the Proposition 1B – Goods Movement Emission Reduction Program (Prop. 1B Program) in the South Coast Air Basin (SCAB).

Below is a summary of SCAQMD's experience with the Prop. 1B Program:

Table 1: SCAQMD's Proposition 1B Projects in Year 1 (FY2007-08)

Brainet Category	Number of		Emission Reductions	
Project Category	Projects	Obligated	PM (lbs)	NOx (lbs)
Heavy-Duty Trucks	2,483	121,828,000	1,245,580	26,790,265
Locomotive	4	3,000,000	27,547	1,180,098

Table 2: SCAQMD's Proposition 1B Projects in Year 2 (FY2008-09)

Project Category	Number of Projects	Total Funds	Emission Reductions	
Project Category		Obligated	PM (lbs)	NOx (lbs)
Heavy-Duty Trucks	1,896	83,411,700	513,966	14,022,677
Truck Stop/Distribution Center Electrification	1	90,000	7,090	206,822
Locomotive	6	4,500,000	29,010	314,784
Ship at Berth	25	56,933,870	372,777	21,840,746

Table 3: SCAQMD's Proposition 1B Project in Year 3 (FY2011-12)

Brainet Category	Number of	Total Funds	Emission Reductions	
Project Category Projects		Obligated	PM (lbs)	NOx (lbs)
Heavy-Duty Trucks	104	3,115,000	1,093	973,253

Table 4: SCAQMD's Proposition 1B Project in Year 4 (FY2012-13)¹

Project Category	Number of	Total Funds	Emission Reductions	
Project Category	Projects	Obligated	PM (lbs)	NOx (lbs)
Heavy-Duty Trucks	2,193	90,903,250	112,495	9,929,011

 $^{^1}$ Payments in process for the "Year 4" projects. All equipment must be in operation by 12/31/2015 with funds liquidated by 3/31/2016.

SCAQMD has executed hundreds of contracts with equipment owners amounting to over \$385 million in program funding. SCAQMD has served as the lead agency in administering the Program for projects in source categories including locomotives, ships at berth, and heavy-duty trucks for the LA/Inland Empire trade corridor, resulting in significant air quality and public health benefits to the region. For these projects, the new trucks will be in place for at least five years while the ships at berth, locomotive and truck stop electrification infrastructure projects will be in place for at least 10 years, providing long-term emission reductions in the region.

2. Project Proposal

a. Trade Corridor Targeted, Air Quality Problems, and Key Contributing Pollutants

SCAQMD's proposal will reduce emissions from locomotive-related freight transport activities in the Los Angeles/Inland Empire trade corridor. This region is the gateway for the nation's goods movement traffic with Asia, and its residents are disproportionately impacted by the diesel air pollution resulting from these freight movement activities. The trade corridor includes the two largest ports in the western United States, the Port of Los Angeles (POLA) and Port of Long Beach (POLB), as well as the Port of Hueneme (POH). More than 40% of the nation's seaborne container trade moves through POLA and POLB, which together form the single largest fixed source of air pollution in the SCAB. The mobile emission sources operating in and around the ports, including freight locomotives, ocean-going vessels, commercial harbor craft, cargo handling equipment, and heavy duty diesel trucks, are collectively responsible for the majority of smog and particulate-forming nitrogen oxide emissions in the region. Furthermore, the California Air Resources Board (ARB) estimates that port and railyard related particulate matter emissions are a leading airborne cancer risk to residents of the region.

The eastern half of this region supports the massive warehousing and distribution centers needed to manage and organize the freight flowing from the ports to destinations throughout the country. The trucks, locomotives, railyard, and distribution center equipment managing these goods movement activities are significant emission sources in the Inland Empire. Furthermore, the general onshore flow of air sends much of the SCAB regions' pollution eastward, where it is trapped by the San Gabriel and San Bernardino mountains and exposed to abundant sunlight which triggers photochemical reactions that produce ozone and the majority of particulate matter. In SCAQMD's annual historical air quality data, portions of the Inland Empire experience the worst air quality in the region and the nation for both ozone and PM10.

Diesel engines used for freight transport in the SCAB represent significant sources of diesel particulate matter (PM) emissions. Diesel PM has been identified as a toxic air contaminant based on its potential to cause cancer, premature death, and other health problems. The MATES IV report (SCAQMD)

Multiple Air Toxics Exposure Study, 2015) found that the highest concentration of diesel PM occurs around the Ports of Los Angeles and Long Beach. The report also found that the distribution of diesel particulates is aligned with the transportation corridors including freeways, major arterials and rail right-of-ways. Although the region has made great strides in reducing diesel PM compared with previous MATES studies, PM continues to dominate the overall cancer risk from air toxics, and residents surrounding the Ports of Los Angeles and Long Beach continue to experience the highest risks, followed by a Los Angeles rail yard location.

Locomotive operations in the SCAB play an essential economic role in moving containerized goods from POLA and POLB out into local distribution centers and across the country. However, these locomotive operations are one of the largest sources of the air pollution problems described above. Locomotives emit about 17.3 tons/day of smog- and particulate-forming oxides of nitrogen (NOx) in the SCAB, and they are forecast to still contribute approximately 17.8 tons/day of NOx by 2023, based on the SCAQMD's 2016 AQMP White Paper for Goods Movement. Locomotives also are a significant source of noise, odors and toxic diesel particulate emissions. Perhaps most importantly, many locomotives operate or idle next to neighborhoods and schools, causing public nuisance and serious public health concerns. As such, there is a need to develop mechanisms or incentives for rail operators to use the cleanest equipment when transporting goods through California.

The SCAB is disproportionately exposed to air pollution as compared to the rest of the nation, with major portions of that burden imposed by managing the nation's freight transport activities. Based on ARB's 2013 Almanac, the SCAB receives exposure to PM2.5 concentrations well above federal health standards. Currently, about 42% of all diesel-related NOx emissions in the SCAB are from goods movement related source categories, according to SCAQMD's Preliminary Draft 2016 AQMP White Paper on Goods Movement. Thus, this trade corridor needs major reductions in goods-movement-related emissions to significantly reduce unhealthful emissions.

b. Identification of Funding Category

This application is specific to the source category of "Locomotives." All proposed projects in this source category entail replacing or retrofitting a switcher, medium horsepower, or line-haul locomotive with a new engine or alternative technology that meets U.S. EPA Tier 4 or lower emission standards, or installing an emissions capture and control system.

Further descriptions of our proposed projects within this source category are provided in the subsections that follow. Cost details of our proposed projects are provided in the Funding Demonstration section.

- c. Air Quality Problems and Key Contributing Pollutants in the Trade Corridor
 (Please see our detailed description in Section 2a above.)
- d. Consistency with Local and Regional Plans

The proposed Proposition 1B funded program is consistent with several interrelated plans in the South Coast region to reduce emissions from freight transport activities. A common denominator for all these plans is the pressing need to greatly accelerate the locomotive fleet turnover to more rapidly realize the benefits of modern engines with state-of-the-art emission controls. The availability of Proposition 1B funds is critical to expedite this process. Our application to fund the replacement, retrofit, and installation of emissions control equipment in locomotives is consistent with the local and regional plans described below.

These inter-related local, regional, and state plans include the following:

SCAQMD's 2012 Air Quality Management Plan (AQMP) – In its 2012 AQMP, the SCAQMD addresses the emissions impacts from locomotives via two measures:

Off-Road Mobile Source Measure ¹	Description
OFFRD-02	Proposed control measure for the accelerated use of Tier 4 locomotives in the SCAB
ADV-02	Proposed measure for the development/deployment of zero-emission and near-zero emission technologies for locomotives

¹2012 AQMP, Chapter 4: Control Strategy and Implementation, Table 4-6

Both measures focus on achieving NOx and PM emission reductions from locomotives and support the transition to newer, cleaner technologies. It emphasizes accelerating the introduction of cleaner line-haul and switcher locomotives by repowering existing locomotive engines or introducing new locomotives with advanced emission control technologies. The fundamental basis for proposing these locomotive measures is to achieve expedited NOx emissions reductions in the SCAB's heavily impacted goods movement corridors. In addition, SCAQMD's proposal for repowering, replacing, or installing emission control technologies for switcher, medium-horsepower, and line haul locomotives is fully consistent with and an integral part of AQMP control measure OFFRD-02.

SCAQMD's Preliminary Draft, 2016 Air Quality Management Plan (AQMP) White Paper for Goods Movement - SCAQMD describes recommended control measures and actions to target the emissions from freight locomotives. Because many locomotives are a federally regulated, multi-regional, form of freight movement, SCAQMD must implement incentives

or other voluntary mechanisms to support a transition to lower-emission equipment for most medium-horsepower and line-haul rail operators. The draft 2016 AQMP recognizes the need to incentivize the purchase and deployment of many Tier 4 locomotives in the Southern California region as early as possible. The target of such incentives is to reduce regional NOx by about 65% by 2023, which is required to achieve the goal of attainment for the National Ambient Air Quality Standards (NAAQS) for 8-hour ozone.

South Coast Memorandum of Mutual Understanding (MOU) (1998) — California's 1994 State Implementation Plan (SIP) control measure M14 assumes that cleaner federally-complying locomotives be operated in California and the SCAB. As a result of measure M14, ARB staff developed a MOU with the California Railroads and the U.S. EPA that was signed in July 1998. The MOU includes provisions for early introduction of clean units, with requirements for a fleet average in the SCAB equivalent to U.S. EPA's Tier 2 locomotive standard by 2010.

Other Related SCAQMD Rules – In an effort to reduce the public health risk from locomotive emissions, SCAQMD's Governing Board has adopted the "3500" series of rules (Rules 3501, 3502, and 3503), which target the reduction of emissions in railyards associated with idling locomotives.

The San Pedro Bay Ports Clean Air Action Plan (CAAP) – This landmark plan, which was adopted November 2006, includes control measures to reduce locomotive emissions associated with moving containers in and out of the ports. The CAAP update in 2010 focuses on the measures to modernize locomotive fleets and also requires that Class 1 line haul and switcher locomotives meet emissions equivalent to EPA's Tier 3 locomotive standards by 2023. Our application to repower switcher and line-haul locomotives will provide needed additional emission reductions while supporting the objectives identified in the San Pedro Bay Ports CAAP.

SCAG Regional Transportation Plan 2012-2035 – Regional planning organizations such as the Southern California Association of Governments (SCAG) play major roles in addressing transportation-related air quality and congestion problems in the goods movement corridors that make up the Proposition 1B Los Angeles/Inland Empire trade corridor. The most recent SCAG Regional Transportation Plan (RTP) emphasizes further emission reductions from transportation sources, such as locomotives, to comply with SB 375, a senate bill from which ARB establishes targeted emission goals for 2020 and 2035. SCAQMD's Proposition 1B proposal is fully consistent with regional transportation planning priorities and emission goals for locomotives.

ARB's 2015 Sustainable Freight: Pathways to Zero and Near-Zero Emissions Discussion Document - This document was prepared by the ARB as an initial effort to develop a comprehensive, integrated sustainable freight plan, in partnership with other State and local agencies. The ARB considers the development of this plan a high priority to address localized health impacts, attainment of air quality standards, and achieving climate goals. The document identifies multiple recommendations and approaches to reduce NOx emissions from freight transport-related locomotive and railyard activity including coordination with federal agencies to develop stricter emission requirements and support for new lower emission and zero emission technologies. Of the recommendations, ARB is focusing on the proposal of near-term measures for Board consideration in 2018, including a measure to maximize the use of Tier 4 engines, liquefied natural gas, or better line-haul, medium horsepower and switch locomotives. SCAQMD's Proposition 1B proposal will provide funding support to accelerate implementation of the measures of ARB's 2015 Sustainable Freight document.

<u>California's Statewide Rail Yard Agreement to Reduce Diesel PM</u> – In June 2005, the ARB has established a Rail Yard Agreement (Agreement) with Union Pacific Railroad Company (UPRR) and Burlington Northern and Santa Fe Railway Company (BNSF). This agreement obligates the railroads to significantly reduce diesel emissions in and around rail yards in California, and includes provisions that will significantly clean up the state's biggest rail yards.

<u>U.S. EPA's Locomotive Rulemaking</u> – The U.S. EPA's final locomotive rulemaking sets new Tier 4 line haul locomotive standards for PM and NOx in 2015. The new standards require emission reductions for new locomotives at 70 and 75 percent for PM and NOx, respectively, below current Tier 2 standards. In addition, new Tier 3 PM standards are required for line haul locomotives, and new requirements apply for manufacturing and / or re-manufacturing locomotives.

e. Other Related Information Requested by ARB Staff

(At this time, SCAQMD has no information for this section.)

3. Provisions to Customize Proposal

SCAQMD has no plans to customize this proposal by incorporating any of the approved Program options described in Chapter III.C of the guidelines, except as noted below.

Important note: This application attempts to best identify all known project factors, including any "alternatives" defined by ARB. However, it is not possible at this time to

predict or detail all factors that may affect deployment of projects that will be cost shared with Prop 1B funds.

a. Technology Alternatives

The guidelines indicate that local agencies can "customize" a source-category specific proposal by incorporating a variety of technology alternatives. SCAQMD does not currently anticipate the need to use any "technology alternatives" or any alternative implementation approaches for this project category.

b. Project Implementation Approaches and Use of Contractors

SCAQMD is acting as the lead project applicant / local agency and shall retain full responsibility for the program requirements and deadlines specified in the Guidelines and executed grant agreements with ARB. SCAQMD will solicit project proposals from equipment owners located at the railyards. SCAQMD will evaluate each application for eligibility, and then competitively rank each project proposal in accordance with the Guidelines to determine which equipment projects will be funded. Program funds will not be committed prior to the competitive ranking process.

SCAQMD may utilize contractors to assist in evaluating technologies and proposals. Additionally, any contractors will be screened to ensure there is no conflict of interest. When a contractor is utilized for an analysis, final determinations will be conducted by SCAQMD.

c. Procedure / Process Alternatives

At this time, SCAQMD does not propose any project alternatives involving alternative procedures or processes.

d. Geographic Operations

SCAQMD is not proposing to customize or limit the geographic operations of the locomotive projects. All locomotive projects will be monitored for compliance with the Guideline requirements for geographic operations. Line-haul locomotives make deliveries across many goods movement corridors in and outside of California. The guidelines allow the owner to specify the percentage of CA operation for the line-haul locomotive project in the application (between 30% and 100%). The funding level will be based on the percentage of CA operation and the year the project becomes operational. Switcher and medium-horsepower locomotive projects must commit to 90% or 100% operation in California, with 50% operation in the four trade corridors. The benefits of locomotive projects are expected to accrue to many disadvantaged and emissions-impacted Southland and rail yard communities throughout the SCAB and statewide.

4. Funding Demonstration Elements

This section documents that 1) SCAQMD has the fiscal ability to implement the proposed projects; and 2) all non-Program match funds will be reasonably available within the timeframes of the proposed project schedule.

SCAQMD will be the lead local agency for this application. Below is an overview of SCAQMD's financial structure.

The latest budget adopted by SCAQMD's Governing Board is for FY 2014 – 2015. The FY 2014-15 Budget & Work Program categorizes expenditures into nine work program categories. These categories include: Advance Clean Air Technology; Ensure Compliance with Clean Air Rules; Customer Service and Business Assistance; Develop Programs to Achieve Clean Air; Develop Rules to Achieve Clean Air; Monitoring Air Quality; Timely Review of Permits; and Policy Support. Each activity performed by the SCAQMD falls into one of the above categories. The budget for each program category ties the goals and objectives of the agency to each of its program activities, identifying resources, performance measures/outputs and legal mandates. A complete description of each work program can be found in the Work Program section of the FY 2014-15 Budget & Work Program. The following table identifies the expenditures by category for FY 2014-15.

Table 5: SCAQMD's FY2014-15 Budget by Funding Category

PROGRAM CATEGORIES	FY 2014-15 Budget (\$)
ADVANCE CLEAN AIR TECHNOLOGY	\$ 5,943,279
ENSURE COMPLIANCE WITH CLEAN AIR RULES	40,595,094
CUSTOMER SERVICE AND BUSINESS ASSISTANCE	11,257,410
DEVELOP PROGRAMS TO ACHIEVE CLEAN AIR	9,001,281
DEVELOP RULES TO ACHIEVE CLEAN AIR	6,937,646
MONITORING AIR QUALITY	10,159,755
OPERATIONAL SUPPORT	24,127,044
PERMIT REVIEW	20,331,852
POLICY SUPPORT	3,866,713
TOTAL	\$ 132,220,074

More detailed budget information, including the most recent fiscal audit reports, can be found at: http://www.aqmd.gov/home/about/finance

a. Program Funds Requested

As shown in the table below, the total amount of Program funds requested for projects in the locomotive category is \$20,600,000. This is based on the expected demand for funding in this category and the estimated per unit cost of new equipment:

Table 6: Program Funds Requested by Heavy-Duty Diesel Truck Project Category

Table 0. Flogia	Duty Diesel Truck Pr	Total		
Project Option	No. of Projects ²	Estimated Per Unit Project Cost	Prop. 1B Funding Level	Program Funds Requested
Switcher (1,006 - 2,300hp)	TBD	\$2,000,000- \$3,000,000	If operational in Year 2016: 85% up to \$2,125,000 If operational in Year 2017: 80% up to \$2,000,000	TBD
			If operational in Year 2018: 75% up to \$1,875,000	
Medium horsepower (2,301 – 4,000hp)	TBD	\$2,000,000- \$3,000,000	If operational in Year 2016: 85% up to \$2,550,000 If operational in Year 2017: 80% up to \$2,400,000 If operational in Year 2018, 75% up to \$2,250,000	TBD
Emissions Capture and Control System	TBD	TBD	Up to 80% of eligible costs or a level commensurate with 0.10 lbs/State \$, whichever is lower	TBD
Line-Haul Locomotive (4,001hp or higher)	TBD	\$3,000,000	15% to 85% based on % CA operation or up to \$2,550,000 if project operates at least 90% in CA	TBD
Total	15	-	-	\$30,900,000*

^{*}Includes 3% of administration funds

 2 The number of projects assigned to each project option within the funding category may change at the time of ranking approval

Pursuant to Chapter 4, Subsection (B)(2) of the Guidelines, SCAQMD is required to liquidate funds to locomotive equipment owners within 2 years after contract execution, with the exception of manufacturer delays for equipment meeting U.S. EPA Tier 4 or lower emission standards. SCAQMD may extend the deadline to liquidate the project funds by up to 12 additional months, as approved by ARB. Payment will be made once certification/verification is documented and the project passes a post-inspection by SCAQMD. The extended expenditure period will not exceed the statutory liquidation deadline. More detailed information regarding scheduling can be found in Section 7, below.

As the lead applicant and local agency, SCAQMD seeks 3% of the total project funds requested for administration fees, per allowances in the Guidelines. SCAQMD shall follow all Guidelines regarding the use of administration funds, as specified by ARB in Chapter 2, Subsection (F)(2)(a).

Pursuant to the Guidelines, SCAQMD is capping its request for administration funds at 3%. SCAQMD will use the administration funds for tasks associated with Program outreach/marketing, implementation, and audit and oversight, including: staff time; consultant fees; printing, mailing, and travel costs; project monitoring and compliance expenses; and indirect costs, such as general administrative services, office space, and telephone services.

NOTE: SCAQMD acknowledges that there may be insufficient funds in the statewide system to cover all locomotive projects requested under this application. We further acknowledge that ARB staff may pro-rate our proposed project at a lower level of funding and proportionally lower the number of projects that can be funded. Upon notification from ARB about the amount of available funding for this source category, we will prioritize awards using the competitive ranking process identified by ARB in the Program Guidelines.

b. Match Funding Requirements

It is anticipated that all matching funds under this particular application will be provided by the private parties that are purchasing the new equipment and, if cofunding is involved, through other grant funds. SCAQMD is not currently planning to apply additional incentive or matching funds to these Prop 1B projects.

5. Air Quality Benefits

As noted, SCAQMD is proposing the replacement or retrofit of switcher, medium horsepower, and line-haul locomotives with engines or alternative technologies that meets U.S. EPA Tier 4 or lower emission standards, and the installation of emissions capture and control systems. Per the Guidelines, SCAQMD has used the Goods Movement Online Database provided by ARB to quantify the emission reductions and

cost-effectiveness of projects proposed in this application. All proposed projects were able to be quantified with the Goods Movement Online Database.

Table 7 provides a summary from the Project Benefits Calculator (from GMOD) showing the overall emissions benefits and cost effectiveness for all 15 truck projects proposed under this application.

Table 7: Estimated Emissions Benefits and Cost Effectiveness³

Estimated PM Reductions	75,600 lbs
Estimated NOx Reductions	2,094,300 lbs
Sum of Weighted Emission Reductions	3,606,300 lbs
Total Program Bond Funding Request	\$30,900,000
Benefits per State Dollar Invested	0.12 lbs/\$

6. Staff Resources

SCAQMD has sufficient staff resources to successfully implement this local agency project proposal. This section affirmatively demonstrates that SCAQMD has the necessary resources in place to meet the demands of the project type and scope.

Over the last decade SCAQMD has demonstrated the capability and expertise to successfully plan, implement and administer the Prop. 1B and other similar incentive-based programs. ARB staff members are very familiar with our collective accomplishments in these areas, an overview of which we have provided below.

NOTE: At ARB's request, we can provide documentation statistics regarding the relationship between the number of pieces of equipment that can be replaced or upgraded in a given timeframe, and the number of program staff needed to accomplish those projects.

a. Overview of Prior Incentive Program Experience for the Proposed Team

SCAQMD has successfully been administering incentive programs to reduce emissions from diesel source categories for more than a decade. This resume of experience includes a wide array of replacement, repower and retrofit efforts across multiple programs, including those that specifically on-road and off-road diesel engine applications. SCAQMD has established a very strong track record administering Proposition 1B Goods Movement Emission Reduction programs in the LA / Inland Empire Trade Corridor, culminating with deployment of thousands of lower-emitting heavy-duty vehicles and equipment. In the first 4 years of the Program, SCAQMD executed contracts for over 6,600 heavy-duty diesel truck projects, 10 locomotive projects, and 25 ships at berth projects.

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³ Estimated emissions benefits are as calculated by ARB's GMOD.

SCAQMD has served as a successful partner with ARB and other participating entities by acting as the lead agency for soliciting, evaluating, contracting, and deploying thousands of equipment projects under the Proposition 1B Program. Over the last several years, SCAQMD staff has experience working with ARB on a range of issues related to Proposition 1B funding for heavy-duty diesel trucks, truck electrification infrastructure, shore power, and locomotive projects.

b. Total Staff Positions and Resources

Details about currently available resources from SCAQMD are provided below. As SCAQMD is already implementing major incentive efforts, it is not currently anticipated that additional staff or new consultant resources will need to be added.

Table 8: Summary SCAQMD Staff / Consultant Resources for Project Implementation

Staff Classification / Job Description	# Currently Available for Proposed Project Source Category ⁴
Program Staff (Marketing, Outreach, Grants, Contracts, Inspections, Audits, etc.)	8
Managerial / Supervisory Staff (all source categories)	7
Administrative Support Staff (all source categories)	3
Fiscal / Accounting (all source categories)	2
Contractors / Consultants (individuals from multiple sources)	10
Grand Total	30

7. Project Schedule

A detailed project schedule is provided in Table 9 below, which lists the anticipated date to accomplish each of the milestones identified in the Guidelines. This incorporates our obligation and liquidation deadlines as identified in Chapter IV, Subsection (B) of the Guidelines.

Table 9: Project Schedule: Anticipated Dates of Events and Milestones

Project Event / Milestone	Date
(1) Date of community meeting / participation event (see Chapter III.D)	July 22, 2015
(2) Equipment project solicitation period, including marketing/outreach	1st Quarter 2016
(3) Equipment project application review period	2nd Quarter 2016
(4) Competitive ranking of equipment projects and web posting	July 2016
(5) Selection of equipment projects from the competitively ranked list	July 2016
(6) Anticipated date of next grant disbursement request to ARB and amount	TBD
(7) Equipment owner notification period	July 2016

⁴ These numbers are best estimates at the time of the application.

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(8) Equipment pre-inspection period (as applicable)	July 2016
(9) Local agency obligation deadline (all contracts must be signed)	Within 2 years after the date of an executed grant agreement with ARB
(10) Equipment post-inspection period	Prior to final payment of the Program funds
(11) Local agency liquidation deadline (all equipment funds must be liquidated)	Within 2 years after contract execution, unless manufacturing delay
(12) Anticipated submittal of local agency project completion report	TBD

8. Certification to Comply with Program Requirements

SCAQMD certifies that it has the ability and intent to fully and effectively satisfy each of the proposed requirements for local agency project implementation. Below is a detailed summary of how SCAQMD will structure this program to meet each requirement listed in the 2015 Guidelines.

a. Support Community and Public Participation

SCAQMD's Year 5 locomotive category outreach will build on our previous, extensive outreach with railyard and locomotive operators. We have built these long-term relationships through current incentive efforts, such as the Carl Moyer Program, and due to previous incentive programs, such as the Proposition 1B (Years 1-4), Carl Moyer, and collaboration with the San Pedro Bay Ports' Clean Air Action Plan Program.

In general, SCAQMD utilizes an extensive internal community relations system to generate community participation in various incentive programs. To augment our extensive internal capabilities from our Public Affairs Department and our Technology Advancement Office, SCAQMD utilizes a team of proven and highly skilled third-party consultants. For more than a decade, SCAQMD has regularly prepared and released solicitations targeted to equipment owners under the Carl Moyer Program and, more recently, the Prop 1B Program. We are skilled at ensuring fully open solicitations as required under the Guidelines and intend to use similar mail, press, online, phone, and in-person resources and approaches to conduct outreach for the proposed Year 5 Proposition 1B program.

In addition, our consultants administered the Gateway Cities Fleet Modernization Program, as well as the landmark POLA / POLB Clean Trucks Program, which included cost sharing through Proposition 1B. These consultants also implemented the Faster Freight – Cleaner Air and High Horsepower conference series, and have provided direct outreach about grant programs to goods movement operators throughout the nation.

SCAQMD has already taken the first step in its outreach program under this round of the proposed Proposition 1B program: on July 22, 2015, SCAQMD held

a local agency pre-application community meeting at the SCAQMD main office in Diamond Bar, California. In order to advertise this meeting, SCAQMD posted a notice on SCAQMD's Prop. 1B Program webpage and emailed the notice to truck dealers and manufacturers, TRU dealers and manufacturers, representatives at the ports as well as locomotive authorities. A copy of the SCAQMD preapplication community meeting notice is attached (see Attachment 1). The purpose of this meeting was to solicit public comments on potential funding categories for the current application to ARB under the Year 5 Proposition 1B program. It was well-attended by 21 qualified stakeholders, including dealers, truck owner/operators, Port consultants and technology providers (see Attachment 2). Comments during the meeting indicated that the attendees are highly interested in program participation, and that their primary concerns surround eligibility and the operational applicability of the advanced truck technologies eligible under this program. SCAQMD's marketing plan for the Year 5 Program will ensure that potential applicants are aware of eligibility requirements, technology options, and the timeline flexibility surrounding advanced technology project options.

b. Conduct Marketing and Solicit Equipment Project Applications

SCAQMD has already identified and built relationships with the three major seaports and approximately thirteen railyards that may be interested in projects to reduce emissions from CHE and ships at berth. In close cooperation with SCAQMD, the ports and railyards are expected to separately conduct marketing efforts to further solicit project applications from their respective locations and end user tenants. Upon award of grant funding from ARB, SCAQMD will implement marketing strategies that target the owners of Program-eligible equipment, including but not limited to: coordination with the three Ports and notifying their list of tenants of the funding opportunity, direct outreach to railroad and railyard operators, holding public workshops, notifying all dealerships that are currently participating in SCAQMD incentive programs, posting announcements on SCAQMD's webpage, and other strategies that have worked well to implement the early years of the program. SCAQMD anticipates releasing the solicitation for projects during the first quarter of 2016, distributing clear application submittal forms and guidance using the mechanisms identified above, and providing translation support as-needed.

c. Review and Competitively Rank Project Applications (Including Web Posting)

This function will be handled by SCAQMD's internal incentive programs staff in consultation with the participating entities, with assistance as needed from our consultants. Collectively, we have reviewed, ranked and selected thousands of projects across a wide array of source categories, including those involving diesel vehicles and port related applications. All procedures and guidelines for the Program will be rigorously followed.

d. Select Equipment Project for Funding, Including Local Approval Process

Equipment projects will be selected based on all Guidelines and requirements, after all applications are thoroughly reviewed by SCAQMD and the participating entities. SCAQMD will prioritize awards using the competitive ranking process identified by ARB in the Program Guidelines. Switcher projects are a high priority for the Proposition 1B program. Locomotive projects based on engines meeting the most stringent national emission standards will be prioritized per the stated Year 5 priorities. SCAQMD staff plan to complete the evaluation of applications and recommend awards for approval by the SCAQMD Governing Board in July 2016. This schedule is subject to change depending upon the number of applications received.

e. Conduct Equipment Project Pre-Inspections and Compliance Checks

SCAQMD staff will arrange and conduct equipment pre-inspections, similar to how we conduct inspections under the current Proposition 1B Program. SCAQMD staff will also work closely with ARB to complete the required compliance check process. All staff to be involved have prior experience through Proposition 1B and other incentive programs. Further, all procedures and guidelines for the Program will be rigorously followed.

f. Notify Equipment Owners of their Application Status

SCAQMD will utilize similar existing procedures currently under the Proposition 1B Program to ensure that equipment owners are notified in a timely and effective manner about all requirements, deadlines, reporting obligations, etc.

g. Execute Equipment Project Contracts

Drawing on past similar experience with Proposition 1B-funded projects, SCAQMD will use existing policies and procedures to ensure that equipment project contracts are executed as expeditiously as possible in accordance with all Guidelines.

h. Ensure Equipment Project Scrappage or Alternatives to Scrappage

For more than a decade under various air quality programs, SCAQMD has been working with licensed dismantler facilities throughout the SCAB to scrap replaced light- and heavy-duty vehicles and equipment. For example, under the Carl Moyer Voucher Incentive Program (VIP) and the current Proposition 1B Program, we follow all applicable guidelines for vehicle scrappage using various DMV-licensed facilities. SCAQMD staff has extensive experience reviewing inspection reports, photographs and other documentation to verify each truck was destroyed in accordance with the program requirements. If locomotive projects elect to scrap their equipment instead of ban them from California operations, SCAQMD

will utilize these existing procedures and relationships with licensed dismantling facilities to set up an efficient, effective scrappage system under our proposed Proposition 1B Program.

For equipment owners that have elected to ban the old locomotive or engine from future operation in California, SCAQMD staff will ensure that a GPS device is installed in both the old equipment and new equipment, as well as coordinate with the award recipient to ensure data reports are filed and reviewed to ensure ongoing compliance.

i. Conduct Post-Inspections of New or Upgraded Equipment

This process will be part of the ongoing activities of SCAQMD staff assigned to conduct inspections under the Proposition 1B Program. SCAQMD has dedicated inspectors that are trained and well-experienced in conducting the post-inspections for the Proposition 1B Program. All procedures and guidelines for the Program will be rigorously followed.

j. Request Disbursements from ARB

SCAQMD has extensive experience working with ARB to request funds under the Proposition 1B Program, Carl Moyer Program, and other incentive programs. Our team will work closely with ARB staff to ensure that requests for Proposition 1B funds are provided in a timely manner that complies with all ARB's needs and requirements.

k. Process Invoices and Requests from Equipment Owners for Payment (Including Direct Payments to Vendors)

SCAQMD has extensive experience in this area through more than a decade of running the Carl Moyer Program and more recently the Proposition 1B Program. For example, the SCAQMD processed thousands of invoices for heavy-duty diesel truck and equipment projects funded by the Proposition 1B Program, which consisted primarily of direct payments to vendors through established mechanisms to pay invoices after the transaction is fully executed, or we can issue two-party checks in the name of each grantee and his/her selected dealership selling the replacement truck. Within the guidelines and constraints set up by ARB, we will continue to build on this prior experience to successfully administer new rounds of Proposition 1B funds.

I. Calculate and Report Earned Interest

SCAQMD's Treasurer, the Los Angeles County Auditor/Controller, calculates interest based on average daily cash balances. SCAQMD tracks the interest earned for specific grant programs based on the monthly interest statements we receive from Los Angeles County. Calculation and reporting of Proposition 1B

Funding interest earned will be consistent with how interest is calculated for other restricted grant programs. If any special requirements or procedures exist, SCAQMD will work with the appropriate State officials to incorporate them.

m. Evaluate Equipment Projects / Assess On-Going Compliance with Contract Conditions

SCAQMD and our consultants have extensive experience in evaluating equipment project applications. SCAQMD has received thousands of applications through past solicitations which have provided SCAQMD and our consultants with a significant level of experience in evaluating projects and determining eligibility for program funding. Based on our extensive experience in project evaluations, SCAQMD informed ARB of recommendations for streamlining and many of these recommendations were approved by ARB in the latest update to the guidelines.

SCAQMD has executed hundreds of contracts with equipment owners under the Proposition 1B Program and is experienced in dealing with "non-performance" issues. Our staff members are very adept at working with grant recipients to solve problems while ensuring that emissions reductions from individual projects are maximized. In extreme cases involving non-performance when problems cannot be solved by working directly with grant recipients. SCAQMD will not hesitate to initiate legal action and / or seek reimbursement of funds. SCAQMD aims to find a proper balance between protecting program assets, ensuring air quality benefits, and resolving participant problems, all within the confines of the Proposition 1B Program.

n. Provide Required Reports to ARB

SCAQMD has extensive experience providing reports to ARB and other agencies about heavy-duty vehicle and equipment incentive programs. SCAQMD will utilize existing reporting procedures and methods as the basis to meet the specific reporting requirements of the Proposition 1B program.

o. Participate in Program and Fiscal Audits and Evaluations

SCAQMD staff members are fully prepared to participate in Proposition 1B program and fiscal audits as evidenced by ARB's most recent audit of SCAQMD in August 2010, which included a review of the Proposition 1B Program. ARB audited SCAQMD's Proposition 1B, Carl Moyer, and Lower-Emission School Bus Programs for Fiscal Years 2005-06 through 2008-09.

The 2010 audit was very comprehensive and included both financial and project implementation aspects of SCAQMD's programs. Several facilities were visited and many vehicles were inspected. As noted in ARB's report the SCAQMD's programs are the largest in the State, implementing over \$416 million in State

grants and District-provided matching funds through the replacement and/or retrofit of over 9,000 vehicles and equipment during the subject period, including:

- Over 390 new natural gas school buses;
- 1,000 retrofits of school bus engines;
- Over 2,600 on- and off-road engine and vehicle replacements under the Carl Moyer Program; and
- Over 2,700 truck replacements and 60 engine retrofits under the Proposition 1B-Goods Movement Program.

Due to the SCAMD's robust efforts in implementing these projects, the District's incentive programs have achieved early and surplus reductions of ozone precursors and toxic emissions, as confirmed by ARB in its review report.

ARB also recognized SCAQMD's highly successful implementation of its Proposition 1B-Goods Movement Program "Early Grant" projects, and SCAQMD appreciates ARB's determination that SCAQMDS's efforts have been "commendable," defined as "an exceptional practice that goes beyond the basic requirements for implementing an incentive program.

The most recent audit experience demonstrates that SCAQMD has the capability to efficiently and effectively participate in future audits under the Proposition 1B Program.

9. Resolution of the SCAQMD Governing Board

It is anticipated that the SCAQMD Governing Board will consider adoption of the required resolution at its November 6, 2015 meeting. At that time, SCAQMD staff anticipates that the Board will authorize SCAQMD to enter into a local agency grant agreement with ARB, accept funds, and identification of any matching funds under SCAQMD's fiduciary control as identified in our project funding demonstration. SCAQMD's fully executed Board resolution will meet all requirements stipulated in Chapter III, Subsection (E)(9) of the Guidelines. A draft resolution for ARB's review is provided as an attachment to this application (see Attachment 3). Following SCAQMD's Governing Board approval, a copy of the final resolution will be provided to ARB.

10. Copy of SCAQMD's Letter of Intent

As requested by ARB, attached to this application is a copy of SCAQMD's Letter of Intent stating that SCAQMD wants to compete for Program funds for the Year 5 funding cycle (see Attachment 4).